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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/889,497	07/18/2001	Shu Yamaguchi	•	4197	
2292 75	590 10/19/2005		EXAMINER		
BIRCH STEWART KOLASCH & BIRCH			DOUYON,	DOUYON, LORNA M .	
PO BOX 747 FALLS CHURCH, VA 22040-0747			ART UNIT	PAPER NUMBER	
			1751.		
			DATE MAILED: 10/19/2005		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/889,497	YAMAGUCHI ET AL.				
Office Action Summary	Examiner	Art Unit				
	Lorna M. Douyon	1751				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period wa  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed the mailing date of this communication. (D) (35 U.S.C. § 133).				
Status	•					
1)⊠ Responsive to communication(s) filed on 02 Au	<u>ugust 2005</u> .					
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ This						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-8 and 12-15</u> is/are pending in the ap	oplication.					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-8 and 12-15</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner	r.					
10)⊠ The drawing(s) filed on <u>18 July 2001</u> is/are: a)[	☑ accepted or b)☐ objected to b	y the Examiner.				
Applicant may not request that any objection to the	drawing(s) be held in abeyance. See	∋ 37 CFR 1.85(a).				
Replacement drawing sheet(s) including the correcti	on is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau						
* See the attached detailed Office action for a list of	of the certified copies not receive	d.				
Attachment(s)	•					
1) Notice of References Cited (PTO-892)	4) Interview Summary	•				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P	ate atent Application (PTO-152)				
Paper No(s)/Mail Date	6) Other:					

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## Continued Examination Under 37 CFR 1.114

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 2, 2005 has been entered.
- 2. Claims 1-8 and 12-15 are pending.
- 3. The declaration under 37 CFR 1.132 filed August 2, 2005 is sufficient to overcome the obviousness rejection based upon Van Dijk et al. (WO 94/02573) because Applicants have shown that the detergent granules made by the process of Van Dijk do not meet the classification requirement and properties as those recited.

## Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

## Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1, 3, 5-7 and 12-15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakamura et al. (US Patent No. 4,970,017), hereinafter "Nakamura".

Nakamura teaches a process for the production of granular detergent composition having high bulk density wherein a 25.0 kg/hr of potassium dodecylbenzene sulfonate and a 71.4 kg/hr of a powder mixture were introduced into a kneader to obtain a uniformly kneaded mixture in the form of a sheet, the powder mixture comprising 21.8% by weight sodium alpha-olefin sulfonate, 35.0% by weight Type A zeolite, 25.1% by weight sodium silicate powder and 7.3% by weight sodium carbonate, the sheet was pelletized in a pelleter to facilitate disintegration, the pellets thus obtained were fed to a disintegrating machine comprising a screen, and to 97 parts amount of the disintegrated detergent composition obtained was added 3 parts of Type A zeolite to form a coated granular detergent composition having a bulk density of 0.85 g/cc (850 g/l), a 0.2 dust generation amount and a particle size distribution, after a particle size adjustment, such that there is a 1% residue in the 10 mesh (2.0 mm) sieve, 55% residue in the 10-24 mesh (2.00 mm to about 710 μm) sieve, 42% residue in the 24-60 mesh (about 710 μm to 250 μm) sieve, and 2% passing a 60 mesh (250 μm) sieve (see Example 1 and Table 1 in col. 9, line 45 to col. 14, line

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- 9). The silicate has a ratio of Na<sub>2</sub>O to SiO<sub>2</sub> of 1.0 to 3.5 (see col. 4, lines 55-56). The disintegration is preferably carried out using a disintegrating machine provided with a classification mechanism such as a screening or air classification device or by classifying the disintegrated powder particles with a sieve and, thus, powder particles having a narrow particle size distribution range, e.g., having an average particle diameter of 300 to 2000 µm are obtained (se col. 6, lines 16-25). Even though Nakamura does not explicitly disclose the mass base frequency and dissolving rate of each of the classified granules, it would be inherent in the granules of Nakamura to possess the same characteristics as those recited because the same process steps and same ingredients with overlapping proportions have been utilized. Even if the teachings of Nakamura are not sufficient to anticipate the claims, it would have been nonetheless obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the granules of Nakamura to exhibit similar properties because similar process steps having same ingredients with overlapping proportions have been utilized.
- 7. Claims 2, 4 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Joshi et al. (US Patent No. 4,549,977), hereinafter "Joshi".

Joshi teaches a particulate detergent composition which is prepared by post spraying Neodol 25-7 (a nonionic surfactant) to spray dried base beads to produce a final product consisting of 78% of the base bead, 19.7% of Neodol 25-7 and 2.3% of minor components, the base beads comprising 13% sodium silicate and the resulting product has a bulk density of 0.68 g/cc (680 g/l) and analyze as: 1% on a No. 20 U.S. sieve (850  $\mu$ m), 20% on No. 40 (425  $\mu$ m),

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52% on No. 60 (250  $\mu$ m), 20% on No. 80 (180  $\mu$ m), 5% on No. 100 (150  $\mu$ m), 2% on No. 200 (75  $\mu$ m), and 0% through No. 200 (see Example 1 in col. 11, line 53 to col. 12, line 44). Even though Joshi does not explicitly disclose the mass base frequency and dissolving rate of each of the classified particulates, it would be inherent in the particulates of Joshi to possess the same characteristics as those recited because the same process steps and same ingredients with overlapping proportions have been utilized. Even if the teachings of Joshi are not sufficient to anticipate the claims, it would have been nonetheless obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the particulates of Joshi to exhibit similar properties because similar process steps having same ingredients with overlapping proportions have been utilized.

8. Claims 5-8, 12, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Joshi as applied to the above claims.

Joshi teaches the features as described above. In addition, Joshi teaches that although nonionic detergents are the preferred synthetic organic detergent, mixtures of nonionic and anionic detergents are sometimes even more preferred (see col. 5, lines 36-38). Additional examples of nonionic detergent include the condensation of ethylene oxide with a hydrophobic base formed by condensing propylene oxide with propylene glycol (see col. 5, lines 61-66). The anionic detergents are preferably employed as their sodium salts although potassium salts may also be utilized (see col. 6, lines 36-40). The built detergent composition particles will usually contain from 30 to 80% of builder and 2 to 35% or 40% of synthetic organic detergent (see col. 8, lines 3-11). The builders include silicates having a Na<sub>2</sub>O:SiO<sub>2</sub> ratio from 1:1.6 to about 1:3.4

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(see col. 7, lines 45-48). Other builders include carbonates and ion-exchanging zeolites (see col. 7, lines 14-25), wherein the zeolites read on the crystalline silicate of claims 14 and 15. Joshi, however, fails to specifically disclose the recited amount of anionic surfactant with potassium counterions, the recited total sum of sodium carbonate and alkali metal silicate.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the proportions of the potassium salts of anionic surfactant, sodium carbonate and sodium silicate through routine experimentation for best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lorna M. Douyon
Primary Examiner
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